

OIPE 03/09/01

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**RAW SEQUENCE LISTING
PATENT APPLICATION US/09/757,041**

DATE: 03/22/2001
TIME: 23:59:51

INPUT SET: S36561.raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

SEQUENCE LISTING

E

1
2
3 (1) General Information:
4
5 (i) APPLICANT: Reed, John C.
6 Sato, Takaaki
7
8 (ii) TITLE OF INVENTION: CD40 Associated Proteins
9
10 (iii) NUMBER OF SEQUENCES: 17
11
12 (iv) CORRESPONDENCE ADDRESS:
13 (A) ADDRESSEE: Campbell and Flores
14 (B) STREET: 4370 La Jolla Village Drive, Suite 700
15 (C) CITY: San Diego
16 (D) STATE: California
17 (E) COUNTRY: USA
18 (F) ZIP: 92122
19
20 (v) COMPUTER READABLE FORM:
21 (A) MEDIUM TYPE: Floppy disk
22 (B) COMPUTER: IBM PC compatible
23 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
24 (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
25
26 (vi) CURRENT APPLICATION DATA:
27 (A) APPLICATION NUMBER: 09/757,041
28 (B) FILING DATE:
29 (C) CLASSIFICATION:
30
31 (vii) PRIOR APPLICATION DATA:
32 (A) APPLICATION NUMBER: 08/349,357
33 (B) FILING DATE:
34
35
36
37 (viii) ATTORNEY/AGENT INFORMATION:
38 (A) NAME: Campbell, Cathryn A.
39 (B) REGISTRATION NUMBER: 31,815
40 (C) REFERENCE/DOCKET NUMBER: P-LJ 1203
41
42 (ix) TELECOMMUNICATION INFORMATION:
43 (A) TELEPHONE: (619) 535-9001
44 (B) TELEFAX: (619) 535-8949
45
46

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47      (2) INFORMATION FOR SEQ ID NO:1:
48
49          (i) SEQUENCE CHARACTERISTICS:
50              (A) LENGTH: 2240 base pairs
51              (B) TYPE: nucleic acid
52              (C) STRANDEDNESS: single
53              (D) TOPOLOGY: linear
54
55
56          (ix) FEATURE:
57              (A) NAME/KEY: CDS
58              (B) LOCATION: 137..1766
59
60
61          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
62
63 AGAAGTGATG CCACTTGGTT AAGGTCCCAG AGCAGGTCAG AATCAGACCT AGGATCAGAA      60
64 ACCTGGCTCC TGGCTCCTGG CTCCCTACTC TTCTAAGGAT CGCTGTCCTG ACAGAACAGA      120
65
66 ACTCCTCTTT CCTAAA ATG GAG TCG AGT AAA AAG ATG GAC TCT CCT GGC      169
67 Met Glu Ser Ser Lys Lys Met Asp Ser Pro Gly
68
69             1           5           10
70
71 GCG CTG CAG ACT AAC CCG CCG CTA AAG CTG CAC ACT GAC CGC AGT GCT      217
72 Ala Leu Gln Thr Asn Pro Pro Leu Lys Leu His Thr Asp Arg Ser Ala
73
74             15          20          25
75 GGG ACG CCA GTT TTT GTC CCT GAA CAA GGA GGT TAC AAG GAA AAG TTT      265
76 Gly Thr Pro Val Phe Val Pro Glu Gln Gly Gly Tyr Lys Glu Lys Phe
77
78             30          35          40
79 GTG AAG ACC GTG GAG GAC AAG TAC AAG TGT GAG AAG TGC CAC CTG GTG      313
80 Val Lys Thr Val Glu Asp Lys Tyr Lys Cys Glu Lys Cys His Leu Val
81
82             45          50          55
83 CTG TGC AGC CCG AAG CAG ACC GAG TGT GGG CAC CGC TCC TGC GAG AGC      361
84 Leu Cys Ser Pro Lys Gln Thr Glu Cys Gly His Arg Ser Cys Glu Ser
85
86             60          65          70          75
87 TGC ATG GCG GCC CTG CTG AGC TCT TCA AGT CCA AAA TGT ACA GCG TGT      409
88 Cys Met Ala Ala Leu Leu Ser Ser Ser Pro Lys Cys Thr Ala Cys
89
90             80          85          90
91 CAA GAG AGC ATC GTT AAA GAT AAG GTG TTT AAG GAT AAT TGC TGC AAG      457
92 Gln Glu Ser Ile Val Lys Asp Lys Val Phe Lys Asp Asn Cys Cys Lys
93
94             95          100         105
95 AGA GAA ATT CTG GCT CTT CAG ATC TAT TGT CGG AAT GAA AGC AGA GGT      505
96 Arg Glu Ile Leu Ala Leu Gln Ile Tyr Cys Arg Asn Glu Ser Arg Gly
97
98             110         115         120
99 TGT GCA GAG CAG TTA ACG CTG GGA CAT CTG CTG GTG CAT TTA AAA AAT      553

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| | | | | |
|-----|---|-----|-----|------|
| 100 | Cys Ala Glu Gln Leu Thr Leu Gly His Leu Leu Val His Leu Lys Asn | | | |
| 101 | 125 | 130 | 135 | |
| 102 | | | | |
| 103 | GAT TGC CAT TTT GAA GAA CTT CCA TGT GTG CGT CCT GAC TGC AAA GAA | | | 601 |
| 104 | Asp Cys His Phe Glu Glu Leu Pro Cys Val Arg Pro Asp Cys Lys Glu | | | |
| 105 | 140 | 145 | 150 | 155 |
| 106 | | | | |
| 107 | AAG GTC TTG AGG AAA GAC CTG CGA GAC CAC GTG GAG AAG GCG TGT AAA | | | 649 |
| 108 | Lys Val Leu Arg Lys Asp Leu Arg Asp His Val Glu Lys Ala Cys Lys | | | |
| 109 | 160 | 165 | 170 | |
| 110 | | | | |
| 111 | TAC CGG GAA GCC ACA TGC AGC CAC TGC AAG AGT CAG GTT CCG ATG ATC | | | 697 |
| 112 | Tyr Arg Glu Ala Thr Cys Ser His Cys Lys Ser Gln Val Pro Met Ile | | | |
| 113 | 175 | 180 | 185 | |
| 114 | | | | |
| 115 | GCG CTG CAG AAA CAC GAA GAC ACC GAC TGT CCC TGC GTG GTG GTG TCC | | | 745 |
| 116 | Ala Leu Gln Lys His Glu Asp Thr Asp Cys Pro Cys Val Val Val Ser | | | |
| 117 | 190 | 195 | 200 | |
| 118 | | | | |
| 119 | TGC CCT CAC AAG TGC AGC GTC CAG ACT CTC CTG AGG AGC GAG GGG ACA | | | 793 |
| 120 | Cys Pro His Lys Cys Ser Val Gln Thr Leu Leu Arg Ser Glu Gly Thr | | | |
| 121 | 205 | 210 | 215 | |
| 122 | | | | |
| 123 | AAC CAG CAG ATC AAG GCC CAC GAG GCC AGC TCC GCC GTG CAG CAC GTC | | | 841 |
| 124 | Asn Gln Gln Ile Lys Ala His Glu Ala Ser Ser Ala Val Gln His Val | | | |
| 125 | 220 | 225 | 230 | 235 |
| 126 | | | | |
| 127 | AAC CTG CTG AAG GAG TGG AGC AAC TCG CTC GAA AAG AAG GTT TCC TTG | | | 889 |
| 128 | Asn Leu Leu Lys Glu Trp Ser Asn Ser Leu Glu Lys Lys Val Ser Leu | | | |
| 129 | 240 | 245 | 250 | |
| 130 | | | | |
| 131 | TTG CAG AAT GAA AGT GTA GAA AAA AAC AAG AGC ATA CAA AGT TTG CAC | | | 937 |
| 132 | Leu Gln Asn Glu Ser Val Glu Lys Asn Lys Ser Ile Gln Ser Leu His | | | |
| 133 | 255 | 260 | 265 | |
| 134 | | | | |
| 135 | AAT CAG ATA TGT AGC TTT GAA ATT GAA ATT GAG AGA CAA AAG GAA ATG | | | 985 |
| 136 | Asn Gln Ile Cys Ser Phe Glu Ile Glu Ile Glu Arg Gln Lys Glu Met | | | |
| 137 | 270 | 275 | 280 | |
| 138 | | | | |
| 139 | CTT CGA AAT AAT GAA TCC AAA ATC CTT CAT TTA CAG CGA GTG ATA GAC | | | 1033 |
| 140 | Leu Arg Asn Asn Glu Ser Lys Ile Leu His Leu Gln Arg Val Ile Asp | | | |
| 141 | 285 | 290 | 295 | |
| 142 | | | | |
| 143 | AGC CAA GCA GAG AAA CTG AAG GAG CTT GAC AAG GAG ATC CGG TCC TTC | | | 1081 |
| 144 | Ser Gln Ala Glu Lys Leu Lys Glu Leu Asp Lys Glu Ile Arg Ser Phe | | | |
| 145 | 300 | 305 | 310 | 315 |
| 146 | | | | |
| 147 | CGG CAG AAC TGG GAG GAA GCA GAC AGC ATG AAG AGC AGC GTG GAG TCC | | | 1129 |
| 148 | Arg Gln Asn Trp Glu Glu Ala Asp Ser Met Lys Ser Ser Val Glu Ser | | | |
| 149 | 320 | 325 | 330 | |
| 150 | | | | |
| 151 | CTC CAG AAC CGC GTG ACC GAG CTG GAG AGC GTG GAC AAG AGC GCG GGG | | | 1177 |
| 152 | Leu Gln Asn Arg Val Thr Glu Leu Glu Ser Val Asp Lys Ser Ala Gly | | | |

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| | | | | |
|-----|---|-----|-----|------|
| 153 | 335 | 340 | 345 | |
| 154 | | | | |
| 155 | CAA GTG GCT CGG AAC ACA GGC CTG CTG GAG TCC CAG CTG AGC CGG CAT | | | 1225 |
| 156 | Gln Val Ala Arg Asn Thr Gly Leu Leu Glu Ser Gln Leu Ser Arg His | | | |
| 157 | 350 | 355 | 360 | |
| 158 | | | | |
| 159 | GAC CAG ATG CTG AGT GTG CAC GAC ATC CGC CTA GCC GAC ATG GAC CTG | | | 1273 |
| 160 | Asp Gln Met Leu Ser Val His Asp Ile Arg Leu Ala Asp Met Asp Leu | | | |
| 161 | 365 | 370 | 375 | |
| 162 | | | | |
| 163 | CGC TTC CAG GTC CTG GAG ACC GCC AGC TAC AAT GGA GTG CTC ATC TGG | | | 1321 |
| 164 | Arg Phe Gln Val Leu Glu Thr Ala Ser Tyr Asn Gly Val Leu Ile Trp | | | |
| 165 | 380 | 385 | 390 | 395 |
| 166 | | | | |
| 167 | AAG ATT CGC GAC TAC AAG CGG CGG AAG CAG GAG GCC GTC ATG GGG AAG | | | 1369 |
| 168 | Lys Ile Arg Asp Tyr Lys Arg Arg Lys Gln Glu Ala Val Met Gly Lys | | | |
| 169 | 400 | 405 | 410 | |
| 170 | | | | |
| 171 | ACC CTG TCC CTT TAC AGC CAG CCT TTC TAC ACT GGT TAC TTT GGC TAT | | | 1417 |
| 172 | Thr Leu Ser Leu Tyr Ser Gln Pro Phe Tyr Thr Gly Tyr Phe Gly Tyr | | | |
| 173 | 415 | 420 | 425 | |
| 174 | | | | |
| 175 | AAG ATG TGT GCC AGG GTC TAC CTG AAC GGG GAC GGG ATG GGG AAG GGG | | | 1465 |
| 176 | Lys Met Cys Ala Arg Val Tyr Leu Asn Gly Asp Gly Met Gly Lys Gly | | | |
| 177 | 430 | 435 | 440 | |
| 178 | | | | |
| 179 | ACG CAC TTG TCG CTG TTT TTT GTC ATC ATG CGT GGA GAA TAT GAT GCC | | | 1513 |
| 180 | Thr His Leu Ser Leu Phe Val Ile Met Arg Gly Glu Tyr Asp Ala | | | |
| 181 | 445 | 450 | 455 | |
| 182 | | | | |
| 183 | CTG CTT CCT TGG CCG TTT AAG CAG AAA GTG ACA CTC ATG CTG ATG GAT | | | 1561 |
| 184 | Leu Leu Pro Trp Pro Phe Lys Gln Lys Val Thr Leu Met Leu Met Asp | | | |
| 185 | 460 | 465 | 470 | 475 |
| 186 | | | | |
| 187 | CAG GGG TCC TCT CGA CGT CAT TTG GGA GAT GCA TTC AAG CCC GAC CCC | | | 1609 |
| 188 | Gln Gly Ser Ser Arg Arg His Leu Gly Asp Ala Phe Lys Pro Asp Pro | | | |
| 189 | 480 | 485 | 490 | |
| 190 | | | | |
| 191 | AAC AGC AGC AGC TTC AAG AAG CCC ACT GGA GAG ATG AAT ATC GCC TCT | | | 1657 |
| 192 | Asn Ser Ser Ser Phe Lys Lys Pro Thr Gly Glu Met Asn Ile Ala Ser | | | |
| 193 | 495 | 500 | 505 | |
| 194 | | | | |
| 195 | GGC TGC CCA GTC TTT GTG GCC CAA ACT GTT CTA GAA AAT GGG ACA TAT | | | 1705 |
| 196 | Gly Cys Pro Val Phe Val Ala Gln Thr Val Leu Glu Asn Gly Thr Tyr | | | |
| 197 | 510 | 515 | 520 | |
| 198 | | | | |
| 199 | ATT AAA GAT GAT ACA ATT TTT ATT AAA GTC ATA GTG GAT ACT TCG GAT | | | 1753 |
| 200 | Ile Lys Asp Asp Thr Ile Phe Ile Lys Val Ile Val Asp Thr Ser Asp | | | |
| 201 | 525 | 530 | 535 | |
| 202 | | | | |
| 203 | CTG CCC GAT CCC T GATAAGTAGC TGGGGAGGTG GATTTAGCAG AAGGCAACTC | | | 1806 |
| 204 | Leu Pro Asp Pro | | | |
| 205 | 540 | | | |

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206
207 CTCTGGGGA TTTGAACCGG TCTGTCTTCA CTGAGGTCT CGCGCTCAGA AAAGGACCTT 1866
208
209 GTGAGACGGA GGAAGCGGCA GAAGGCAGAC GCGTGCCGGC GGGAGGAGCC ACGCGTGAGA 1926
210
211 CACCTGACAC GTTTTATAAT AGACTAGCCA CACTTCACTC TGAAGAATTA TTTATCCTTC 1986
212
213 ACAAACATA AATATTGCTG TCAGAGAAGG TTTTCATTT CATTAACTAA GATCTAGTTA 2046
214
215 ATTAAGGTGG AAAACATATA TGCTAAACAA AAGAAACATG ATTTTCTTC CTTAAACTTG 2106
216
217 AACACCAAAA AACACACACA CACACACACA CGTGGGGATA GCTGGACATG TCAGCATGTT 2166
218
219 AAGTAAAAGG AGAATTATG AAATAGTAAT GCAATTCTGA TATCTTCTTT CTAAAATTCA 2226
220
221 AGAGTGCAAT TTTG 2240
222
223
224 (2) INFORMATION FOR SEQ ID NO:2:
225
226 (i) SEQUENCE CHARACTERISTICS:
227 (A) LENGTH: 543 amino acids
228 (B) TYPE: amino acid
229 (D) TOPOLOGY: linear
230
231 (ii) MOLECULE TYPE: protein
232
233 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:
234
235 Met Glu Ser Ser Lys Lys Met Asp Ser Pro Gly Ala Leu Gln Thr Asn
236 1 5 10 15
237
238 Pro Pro Leu Lys Leu His Thr Asp Arg Ser Ala Gly Thr Pro Val Phe
239 20 25 30
240
241 Val Pro Glu Gln Gly Gly Tyr Lys Glu Lys Phe Val Lys Thr Val Glu
242 35 40 45
243
244 Asp Lys Tyr Lys Cys Glu Lys Cys His Leu Val Leu Cys Ser Pro Lys
245 50 55 60
246
247 Gln Thr Glu Cys Gly His Arg Ser Cys Glu Ser Cys Met Ala Ala Leu
248 65 70 75 80
249
250 Leu Ser Ser Ser Pro Lys Cys Thr Ala Cys Gln Glu Ser Ile Val
251 85 90 95
252
253 Lys Asp Lys Val Phe Lys Asp Asn Cys Cys Lys Arg Glu Ile Leu Ala
254 100 105 110
255
256 Leu Gln Ile Tyr Cys Arg Asn Glu Ser Arg Gly Cys Ala Glu Gln Leu
257 115 120 125
258

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SEQUENCE VERIFICATION REPORT
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Line

Error

Original Text